

Clean Copy of Specification

Version with Markings Showing Changes Made to the Specification

On page 6, please replace the third full paragraph with the following:

Figure 1. (A) Chloroplast vector used for transformation of *Nicotiana tabacum* var. Petit Havana. Vector contains the aadA selectable marker gene that confers resistance to spectinomycin, the Prn promoter, and the TpsbA terminator. (B) Amino acid sequence of the lytic peptide MSI-99 (SEQ ID NO: 3).

On page 6, please replace the fifth full paragraph with the following:

Figure 3. (A) Primers, 8P (SEQ ID NO: 2) and 8M (SEQ ID NO: 1) used to confirm integration of foreign genes via PCR. 8P anneals with the 5' end of the aadA gene and 8M anneals with the 3' end of the 16S rDNA gene. PCR analysis of DNA extracted from T₀ (B), T₁ (C) and T₂ (D) plants run on a 0.8% agarose gel. T₀ (B) Lane 1 1kb ladder, 2 through 5 transgenic lines, 6 MSI-99 plasmid. T₁ (C) Lane 1, 1kb ladder, 2 through 4 transgenic, lane 5 plasmid control and lane 6 untransformed plant DNA. T₂ (C) lane 1, 1kb ladder, 2 through 5 transgenic, lane 6 plasmid control and lane 7 untransformed plant DNA.

On page 12, please replace the second full paragraph with the following:

PCR conformation Plant DNA extraction on T₀, T₁, and T₂ was performed using the QIAGEN DNeasy Mini Kit on putative transgenic samples and untransformed plants. PCR primers were designed using Primer Premier software and made by GIBCO BRL. Primer (8p:5' CCACCTACAGACGCTTTACGCCCAATCA 3')(SEQ ID NO: 2) anneals with the 5' end of the aadA and primer (8M:5' ATCACCGCTTCCCTCATAAATCCCTCCC 3')(SEQ ID NO: 1) anneals with the 3' end of 16SrDNA as shown in Figure 3. PCR was carried out using the Gene Amp PCR system 2400 (Perkin-Elmer). Samples were run for 29 cycles with the following sequence: 94°C for 1 minute, 65°C for 1 minute and 72°C for 3 minutes. The cycles were proceeded by a 94°C denaturation period and followed by a 72°C final extension period. A 4°C hold followed the cycles. PCR products were separated on agarose gels.

On page 16, please replace the sixth full paragraph with the following:

DeCosa B, Moar W, Lee S.B, Miller M, Daniell H. (2001) HyperExpression of the Cry2Aa2 operon in chloroplasts leads to the formation of insecticidal crystals. Nature Biotechnology, Vol. 19, No. 1, pp 71-74.